

CLAIM AMENDMENTS:

Claims 1-8 (cancelled)

9. (new) An inductive coupling circuit for information signal transmission in electric energy distribution grids and disposed within a transmission path, the transmission path having a shielded power cable with a power cable conductor, the circuit comprising:

an inductive coupling device having a ring that encloses the shielded power cable, and a coil inductively coupled to said ring and connected to a transceiver unit, wherein a current of a superposed information signal in the power cable conductor flows through a plane defined by said inductive coupling device; and

an earth wire disposed upstream of said plane defined by said inductive coupling, said earth wire connected to the power cable shield and to earth or to a potential compensation, wherein no net current flows in the shield, since there is no conductive connection from one side of said plane to an other side of said plane, other than through said plane itself, and wherein, during transmission, current of an information signal is directly induced into the conductor and, during reception, only current within the conductor is evaluated.

10. (new) An inductive coupling circuit for information transmission in electric energy distribution grids, the grids having a shielded

power cable having a power cable conductor, the circuit being located within a transmission path, the circuit comprising:

an inductive coupling device having a ring which encloses the shielded power cable and a coil inductively coupled to said ring and connected to a transceiver unit; and
an earth wire connected to the power cable shield and to earth or to a potential compensation, the earth wire being lead back through the ring core, wherein current of a superposed information signal in the power cable conductor, a return current and/or induced interference signals on the shield as well as an identical return current and/or induced interference signals flow through a plane defined by said inductive coupling device in opposite directions, wherein magnetic fields of interfering currents are compensated, said inductive coupling device inducing current directly into the conductor when transmitting and only evaluating current in the conductor when receiving.

11. (new) The inductive coupling circuit of claim 9, wherein said inductive coupling device is located in a transformer station and said ring is a ring core or a plastic ring with a wrapped coil.
12. (new) The inductive coupling circuit of claim 10, wherein said inductive coupling device is located in a transformer station and said ring is a ring core or a plastic ring with a wrapped coil.

13. (new) The inductive coupling circuit of claim 9, wherein all inductive coupling devices are linked to a same phase in a transmission path having several underground cables.
14. (new) The inductive coupling circuit of claim 10, wherein all inductive coupling devices are linked to a same phase in a transmission path having several underground cables.
15. (new) The inductive coupling circuit of claim 9, wherein said inductive coupling device is linked to all phases.
16. (new) The inductive coupling circuit of claim 10, wherein said inductive coupling device is linked to all phases.
17. (new) The inductive coupling circuit of claim 9, wherein said inductive coupling device is linked to an incoming line of an transformer.
18. (new) The inductive coupling circuit of claim 10, wherein said inductive coupling device is linked to an incoming line of an transformer.
19. (new) a method for information transmission in electric energy distribution grids having shielded power cables and with an inductive coupling circuit linked thereto, the method comprising the step of:

inductively de-/coupling an information signal through a plane defined by an inductive coupling device of the coupling circuit in such a manner that no net current flows in the power cable shield, wherein no conductive connection is made from one side of the plane defined for the inductive coupling to an other side, other than a connection through the plane itself, wherein, during transmission, information signal current is directly induced into the power cable conductor and, during reception, only a current within the conductor is evaluated.

20. (new) A method for information transmission in electric energy distribution grids having shielded power cables and with an inductive coupling circuit linked thereto, the method comprising the step of:

inductively de-/coupling an information signal in such a manner that a current of a superposed information signal in a conductor of the power cable, a return current and/or induced interference signals on the power cable shield as well as an identical return current and/or induced interference signals flow in opposite directions through a plane defined by an inductive coupling device of the coupling circuit, wherein magnetic fields of interfering currents are compensated, and the inductive coupling device induces current directly into the conductor when

transmitting and only evaluates current in the conductor when receiving.